

09763089

APPLICATOR AND DISPENSING DEVICE USING SAME

Field of the Invention

*See
Spec
Fig 1*

The present invention relates to an applicator for dispensing and applying fluid products to a desired object, and to a dispensing device for mixing and dispensing fluid components under pressure from a plurality of containers to provide a combined multi-component product that may be directly applied to a desired object.

Background Information

It has long been known to dispense a single-component fluid product under pressure from an aerosol or pump-type container or the like. Various types of dispensers are also known which are capable of dispensing a multi-component product by means of the ejection and mixing of two different fluid constituents from separate containers. For example, U.S. Patent No. 4,773,562 discloses a dispenser of the latter type, which is used for dispensing a two-component self-heating shaving cream comprising a first component including a reducing agent and a second component including an oxidizing agent reactive with the reducing agent to liberate heat.

Dispensing devices that provide for the simultaneous release of materials from two containers in response to the pressing of a valve release button or actuation of a pump generally include tubes, ducts, or similar structure for conveying each of the two materials from the respective containers to a mixing chamber at which the materials are combined, the mixing chamber having a single outlet port or nozzle at which the mixture is dispensed. In U.S. Patent No. 4,773,562, for example, a dispensing head is provided with a Y-shaped groove having lateral arms for separately conveying materials dispensed from two different containers to a median arm, where the two materials are mixed and conveyed as a combined product to a single outlet nozzle.

097630589

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph on page 1 under the heading "CROSS REFERENCE TO RELATED APPLICATIONS," which was added in the amendment filed June 13, 2004, to read as follows:

CROSS REFERENCE TO RELATED APPLICATIONS

This application is a National Stage of PCT Application No. PCT/US99/187838, filed August 18, 1999, which ^{is a continuation} ~~claims the benefit~~ of U.S. Application No. 09/135,942, filed August 18, 1998.
